



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

JAN 24 2003

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Roy Palk, President
East Kentucky Power Cooperative
4775 Lexington Road
PO Box 707
Winchester, KY 40392-0707

Dear Mr. Palk:

Enclosed is a Notice of Violation ("NOV") issued to the East Kentucky Power Cooperative ("East Kentucky") under Section 113(a)(1) of the Clean Air Act, 42 U.S.C. § 7413(a)(1). In the NOV, the United States Environmental Protection Agency notifies East Kentucky of violations of pre-construction and operating permitting requirements of the Clean Air Act and the Kentucky State Implementation Plan at the Spurlock plant.

Please note the opportunity to confer outlined in the NOV. As indicated in the NOV, any request to confer should be directed to Charles V. Mikalian. Mr. Mikalian can be reached at (404) 562-9575.

Sincerely,

A handwritten signature in cursive script that reads "Douglas Neely for".

Beverly H. Banister
Director
Air, Pesticides and Toxics
Management Division

cc: John M. Holloway, Hunton & Williams
John Lyons, KDAQ

Enclosures

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4

IN THE MATTER OF:)

EAST KENTUCKY POWER)
COOPERATIVE)

Notice of Violation

Proceedings Pursuant to)
Section 113 and 167 of the)
Clean Air Act, 42 U.S.C.)
§7413, 7467)

EPA-CAA-04-2003-01

NOTICE OF VIOLATION

This Notice of Violation ("Notice") is issued to the East Kentucky Power Cooperative ("East Kentucky") for violations of the Clean Air Act ("the CAA") at its Spurlock coal-fired power plant. Specifically, East Kentucky has violated Title I of the Clean Air Act by failing to comply with Prevention of Significant Deterioration requirements of the CAA and the Kentucky State Implementation Plan. East Kentucky has also violated Title V of the CAA by (1) failing in its Title V permit application to identify all applicable requirements and to propose a compliance schedule and (2) certifying that it was in compliance with the above-listed requirements. This Notice is issued pursuant to Section 113 of the Act, as amended, 42 U.S.C.A. Section 7401-7671q. The authority to issue this Notice has been delegated to the Regional Administrator of the United States Environmental Protection Agency ("U.S. EPA," "EPA," "the Agency") Region 4 and further re-delegated to the Director, Air, Pesticides and Toxics Management Division, U.S. EPA, Region 4.

SUMMARY OF VIOLATION(S)

In January, 1976, East Kentucky submitted a construction permit application for a new steam electric generating unit identified as "Spurlock Unit 2" with a maximum heat input of 4850 million Btu¹ per hour. This application also indicated that 100 percent of the steam generated at the facility would be used in the generation of electricity. [Attachment 1]

In September, 1976, based on a federal PSD application submitted by East Kentucky, the United States Environmental Protection Agency ("EPA") granted approval to construct Spurlock Unit 2, a "major stationary source" under the CAA. [Attachments 1B and 1C]

¹ A Btu or "British thermal unit" is a measurement of energy or heat. It is the amount of energy needed to raise the temperature of one pound of water by one degree Fahrenheit. "MMBtu" is one million Btu or the amount of energy needed to raise the temperature of one million pounds of water by one degree Fahrenheit.

Upon completion of construction, East Kentucky was issued a federally enforceable operating permit on November 10, 1982 that contained, inter alia, a permit condition that limited maximum hourly heat input to the Spurlock Unit 2 to 4850 MMBTU/hr. [Attachment 2] East Kentucky has thereafter been the owner and/or operator of the Spurlock Plant.

The Spurlock Plant is located in an area that has at all relevant times been classified as attainment or unclassifiable for NO₂, SO₂, PM and ozone. Accordingly, the Prevention of Significant Deterioration ("PSD") provisions of Part C, Title I of the Clean Air Act ("CAA") apply to operations at the Spurlock plant.

In August, 1992, East Kentucky began supplying steam from Spurlock Unit 2 to the Inland Container Corp. for use in Inland's manufacturing operations. This activity was contrary to the representations in the 1976 construction permit application for Spurlock Unit 2 that all of the steam generated at Unit 2 would be used to generate electricity. The PSD regulations provide that operation of a source "not in accordance" with its PSD permit application is a violation that subjects the operator to an enforcement action. See 40 C.F.R. 52.21(r)(1).

In December, 1993, East Kentucky sought an increase in the permitted maximum hourly heat input to the boiler from 4850 MMBTU/hr to 5355 MMBTU/hr, which is, in effect, a request for an increase in the boiler's hourly emission rates. In February, 1994, the Kentucky Department of Air Quality ("the Department") responded to this request by advising East Kentucky that such an increase would be considered a major modification under the PSD rules and be subject to PSD permitting requirements if it resulted in a significant net emissions increase. In December, 1994, the Department sent East Kentucky a follow-up letter reminding East Kentucky of the applicable requirements. In January, 1995, East Kentucky stated that it "was reviewing the operating status of [its] units" and withdrew its request for an increase in maximum operating heat rate for Spurlock Unit 2. [Attachments 3 - 6] Thereafter, East Kentucky regularly exceeded the operating heat rate for Spurlock Unit 2.

In 1997, East Kentucky replaced the high pressure turbine with a turbine of a new design that could receive significantly more steam and increased the peak generation of the unit from 508 to 585 megawatts. Based on information available to it and to EPA, East Kentucky anticipated, and experienced, an increase in utilization of the boiler and should have projected a net emissions increase from the boiler well above the "significance levels" established in the CAA for one or more regulated pollutants. This increase in steam demand also resulted in more frequent and greater exceedances of the limitation on maximum operating heat rate for Spurlock Unit 2.

These activities constituted violations of Spurlock Unit 2's operating permit and operation inconsistent with the PSD permit application for the Unit, each of which is a violation of the applicable PSD regulations. See 40 C.F.R. 52.21(r)(1). Additionally, East Kentucky's regular operation in excess of the permitted maximum heat rate is a "physical change or change in the method of operation" that is not exempted from the PSD regulations' definition of "major

modification," because such an increase is prohibited by East Kentucky's federally enforceable operating permit. See 40 CFR 52.21(b)(2)(iii)(f). Since the data necessary to establish these violations was collected and maintained by East Kentucky, it appears that East Kentucky was aware of the violations.

On December 10, 1996, East Kentucky applied for a Title V permit for the Spurlock Plant. In the course of obtaining its Title V permit, East Kentucky again commented that the maximum continuous rating for Unit 2 should be increased, this time to 5600 MMBtu/hr. In its response to East Kentucky's comments, the Division again responded that this limitation could not be increased until compliance with applicable PSD requirements were demonstrated. [Attachment 7] However, in the final Title V permit that was issued on December 10, 1999, the 4850 MMBtu/hr. maximum heat input limitation is replaced by a reference to a maximum continuous rating in the "Description" part of the permit and does not appear to be an enforceable condition of the permit. No terms or conditions are specified under "Operating Limitations." [Attachment 8]

To the extent that this "Description" in East Kentucky's Title V permit is intended to relax the earlier constraint, 40 C.F.R. 52.21 (r)(4) provides that, upon such relaxation of an enforceable limit, the PSD rules apply as if the source had not yet been constructed. To the extent that the Title V Permit is read as incorporating and retaining the prior limitation on heat input, East Kentucky has regularly violated the limitation, thereby triggering PSD requirements. Under either reading of the Title V permit, operation above 4850 MMBtu/hr remains a violation of the PSD rules pursuant to 40 C.F.R. 52.21(r)(1).

Under the applicable Kentucky Title V permit regulations East Kentucky was required to identify all applicable requirements, identify a compliance schedule for those applicable requirements for which the Spurlock plant was not already in compliance, and to certify its compliance.

With respect to the operation above 4850 MMBtu/hr at Spurlock Unit 2, East Kentucky never identified PSD as an applicable requirement, never proposed a schedule for complying with PSD and has failed to identify the noncompliance in its initial or annual certification(s).

These violations of the Act and the State Implementation Plan ("SIP") of Kentucky have resulted in the release of massive quantities of SO₂, NO_x, and/or PM into the environment. [Attachments 9 - 12] Until these violations are corrected, the Spurlock Plant will continue to release massive quantities of illegal SO₂, NO_x, and/or PM into the environment.

RELEVANT STATUTORY AND REGULATORY BACKGROUND

1. When the Act was passed in 1970, Congress exempted existing facilities, including the coal-fired power plant that is the subject of this NOV, from many of its requirements. However, in the 1977 CAA Amendments, Congress also made it quite clear that this

exemption would not last forever. As the United States Court of Appeals for the D.C. Circuit explained in Alabama Power v. Costle, 636 F.2d 323 (D.C. Cir. 1979), "the statutory scheme intends to 'grandfather' existing industries; but...this is not to constitute a perpetual immunity from all standards under the PSD program." Rather, the Act requires grandfathered facilities to install modern pollution control devices whenever the unit is proposed to be modified in such a way that its emissions may increase.

2. The PSD provisions require preconstruction review and permitting for modifications of stationary sources. Pursuant to applicable regulations, if a major stationary source located in an attainment area is planning to make a major modification, then that source must obtain a Prevention of Significant Deterioration ("PSD") permit. To obtain this permit, the source must agree to put on the best available control technology ("BACT") or in the case of a modification that is not major, must meet the emission limit called for under the applicable minor NSR program in the State SIP.
3. Pursuant to Part C of the Act, the SIP of Kentucky requires that no construction or operation of a major modification of a major stationary source occur in an area designated as attainment without first obtaining a permit. See: for PSD permits in attainment areas, Kentucky Administrative Regulation (KAR) 401 KAR 51:017, which was originally made approved as part of the Kentucky SIP on September 1, 1989, at 54 Fed. Reg. 36307, and since amended.
4. The Kentucky SIP provisions identified in paragraph 3 above are all federally enforceable pursuant to Sections 110 and 113 of the Act.
5. Pursuant to Section 502(a) of the Act, 42 U.S.C. § 7661(a), it is unlawful to operate without or in violation of a permit issued pursuant to subchapter V of the Act, 42 U.S.C. § 7661 *et. seq.*
6. Kentucky's program under subchapter V of the Act was granted interim approval by the Administrator on November 14, 1995, (60 Fed. Reg. 57186) and final approval on October 31, 2001, (66 Fed. Reg. 54953). These regulations are currently codified at 401 KAR 52.020. Pursuant to 401 KAR 52.020, Section (3)(1)(b), a source shall operate in compliance with a permit issued pursuant to that regulation.
7. Sections 4(1) and 5 of 401 KAR 52.020 require that a source submit a complete permit application which identifies all applicable requirements and information needed to determine applicable requirements for the source.
8. Section 5(8) of 401 KAR 52.020 requires that a permit application must contain a compliance plan for all applicable requirements for which the source is not in compliance.

9. Section 5(9) of 401 KAR 52.020 requires that a permit application must contain a certification of compliance with all applicable requirements.
10. Sections 21 and 23 of 401 KAR 52.020 require that a source submit compliance certifications annually.
11. Section 113(a)(1) of the Act provides that at any time after the expiration of 30 days following the date of the issuance of this NOV, the Administrator may, without regard to the period of violation, issue an order requiring compliance with the requirements of the state implementation plan or permit, and/or bring a civil action pursuant to Section 113(b) for injunctive relief and/or civil penalties of not more than \$25,000 per day for each violation on or before January 30, 1997, and no more than \$27,500 per day for each violation after January 30, 1997. Sections 113(a)(1) and 113(b) also provide that the Administrator may take the same actions to enforce violations of subchapter V of the Act, 42 U.S.C. § 7661 et. seq.
12. Section 167 of the Act, 42 U.S.C. § 7477, authorizes the Administrator to initiate an action for injunctive relief as necessary to prevent the construction, modification or operation of a major emitting facility which does not conform to the PSD requirements.
13. As provided in Sections 113(a)(1), 113 (b) and 167 of the Act, 42 U.S.C. §§ 7413(a)(1), 7413(b) and 7477, the violations set forth above subject East Kentucky to injunctive relief and civil penalties.

OPPORTUNITY FOR CONFERENCE

Respondent may, upon request, confer with EPA. The conference will enable Respondent to present evidence bearing on the finding of violation, on the nature of violation, and on any efforts it may have taken or proposes to take to achieve compliance. Respondent has the right to be represented by counsel. A request for a conference must be made within 10 days of receipt of this NOV, and the request for a conference or other inquiries concerning the NOV should be made in writing to:

Charles V. Mikalian
Associate Regional Counsel
Environmental Accountability Division
U.S. EPA - Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia 30303
404-562-9575

By offering the opportunity for a conference or participating in one, EPA does not waive or limit its right to any remedy available under the Act.

EFFECTIVE DATE

This NOV shall become effective immediately upon issuance.

1/24/03
Date

Douglas Neely for
Beverly Banister
Director
Air, Pesticides, and Toxics
Management Division